Review of DAQ Procedures

- **Need someone to review Buddy Guide**
  - Last done Dec. 2001 by Brian Davies
  - Changes since beginning of 2002:
    - New L3/DAQ system
    - New Significant Event System
    - Added L2 to readout
    - New logbook features

- **Need <u>everyone</u> to review DAQ Shifters Guide**
  - Verify/validate the current contents
    - Remove outdated docs & Replace with updates
    - Contact expert(s) for assistance
      - Request simple & concise "non-expert" instructions
  - Write up your own documentation when appropriate
    - How-to, Troubleshooting, DAQ Shifter specific, etc.
  - Binders & tabs located in supply cabinet

Maximizing Readout System

- ## Muon readout crate errors
  - Instead of removing the Muon crate, the shifter may be able to disable one or more of the cards in that crate
    - This is called a configuration change – with approval of Shift Captain & coordination with Muon shifter, stop the run, make comments & log entry, and start a new run
      - Will not require a new trigger download
      - Will affect the L2 Muon readout crates – Contact L2 expert

- ## Always verify the status of crates NOT in readout when you come on shift
  - Make sure whiteboard is correct (check email & logbook)
  - Talk with detector shifters or experts
    - Most commonly taken out: any or all of the L2 crates
    - Crate x13 is in commissioning stage

Communication in the Control Room

- **Shift Captain (SC) needs to know what is going on**
  - *Remember*: the SCs are filling out checklists
    - The SC decides when to <u>Start</u> or <u>Stop</u> a Run
    - The SC gives you the info on Run quality
    - Keep SC informed on: Crates in Run, Prescale Sets & Alarms
  - Confirm with SC that you issued store_begin & store_end
    - Michael Begel informed me that D0 has 27 stores with incorrect stop/start times & numbers - CDF only three times (as of March 2002)
      - Happened again last week!
    - The SC gets the call from the MCR when shot setup begins, when scraping ends (Store becomes official) & when the store will be dumped - the DAQ Shifter & SC must synchronize

- **Verbalize your activity**
  - Everyone should know when you:
    - Stop & Start or Pause & Resume a run
    - Having L3/DAQ problems
    - When you leave the control room
  - You should know what detector shifters are doing…
    - Calorimeter Pedestal downloads affect everyone!

New Procedure

- ## Runs.txt file

  - Scott Snyder wrote a script that automatically scrapes the useful information from the database after the run has ended

  - You no longer need to scramble for info at the end of a run

  - How to do it:
    - cd /home/d0run/runsum/
    - setup d0online
    - ./runsum.py "Run #"

  - Copy & paste the output into the Runs.txt file

runsum.py

```
<d0ol07> ./runsum.py 159769
Run: 159769  Store: 1530  2002-Jul-16
00:26:09--2002-Jul-16 04:26:31  (14422s)
Config: official/global_CalMuon_noL2MU-7.40
Presc: 06E30
Shifter: Jyothsna Rani
Comment: physics run
Solenoid on reverse (4749.6938A)
Toroid on forward (1499.4532A)
Begin lum:  6.89E30 (LBN 1393631)
End lum:  5.62E30 (LBN 1393946)
Crates not used: 0x24 0x25
Streams:
   all 362107 evts 187 partitions (25.11Hz)
<d0ol07>
```